Knowledge and awareness level of mental health literacy among pediatricians

Level of mental health literacy among pediatricians

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Abstract

Aim: This study aimed to assess pediatricians' knowledge and awareness levels on mental health literacy (MHL) and investigate the factors affecting this level. Material and Methods: This study was designed as a cross-sectional self-report questionnaire-based internet study conducted on 01 February–25 February 2021. The population of the study consisted of pediatricians. The data were collected using questionnaires sent to volunteer physicians' smartphones. Participants filled in the sociodemographic data and the MHL Scale.

Results: The data of 140 participants were analyzed in the study. The participants' mean age was 37.7 years, and 62.1% were females, 73.6% were married, and 75.0% were working as specialists. Considering index scores, 15% of the participants were observed to have insufficient MHL. Participation in training on child psychiatry (OR:7.5) predicted excellent MHL, while increased years of professional experience were observed to the predictor of insufficient MHL (OR:0.9 per year).

Discussion: This study has investigated the knowledge levels and beliefs of pediatricians about mental health disorders and the important part of pediatricians have been observed to have insufficient MHL. The results have shown that organizing training and meetings in specialty training and intermittently afterward to improve MHL will be beneficial for pediatricians in recognizing and managing groups with mental illness.

Keywords

Child psychiatry; Mental health literacy; Stigma

Introduction

Mental health disorders are recognized as a global public health problem with a more significant impact on young adults than other age groups [1]. These disorders are typical of early-onset and are associated with psychological and physical impairments later in life [2]. According to the World Health Organization (WHO) World Mental Health Survey report, the prevalence of mental health disorders varies from 18% to 36% worldwide [3]. Recent studies have reported that the prevalence of mental health disorders among adolescents is 13–21%, and adolescents experience at least one mental illness until the age of 16 [4]. It has been reported that the rate of adolescents with severe mental disorders is 10–25%, and mental disorders occurring in adulthood start in adolescence [5]. Effective evidence-based interventions are available for many of these disorders and have lasting effects in the future [6]; however, many children with mental health disorders do not get professional help. When they get help, treatment is often delayed duration, or the frequency of treatment received is insufficient. In general, treatments are only received by individuals with severe disorders [7]. Untreated mental health problems and disorders in adolescents and young adults are strong predictors of poor professional achievements, problematic interpersonal relationships, and family functioning, as well as medical conditions associated with the reduced life expectancy, such as diabetes, heart and lung diseases, stroke, and suicide [8]. There are many reasons for the high prevalence rates and insufficient or delayed treatment intake. The low level of knowledge of childhood mental health disorders is one of the important ones. Evidence suggests that improved knowledge of mental health and mental health disorders, better awareness of how to seek help and treatment, and reducing stigma against mental illnesses can enable early diagnosis of mental disorders, improve mental health outcomes, and increase the use of health services [9].

Mental health literacy (MHL) was first defined by Jorm AF as "knowledge and beliefs about the recognition, management, and prevention of mental health disorders" [10]. The ability to support individuals with mental health problems and knowing where to seek help was added to this concept in 2012 [11]. Mental health literacy is a crucial component that ensures the mental health and well-being of individuals and populations in general. Significant barriers identified in providing mental health services to individuals include a lack of knowledge, presence of stigma, and limited access to mental health care [12]. In recent years, numerous scientists have highlighted the evidence of a positive association between low MHL and adverse health outcomes [13].

The literature review shows stigmatizing attitudes, lack of awareness, and false beliefs regarding mental health issues and patients with mental disorders among healthcare professionals (HCPs) throughout the world [14]. Furthermore, many HCPs are shown to have joint problems in feeling inadequate and discouraged in managing and treating individuals with mental illness [15]. It is further indicated that stigmatization culture continues to exist even in the field of health. For these reasons, HCPs with mental health problems avoid seeking help and talking to other colleagues about their problems [16].

There is a general perception that HCPs are better equipped for mental illnesses. They empathize with patients with such problems; however, besides the public, HCPs are known not to have sufficient knowledge about mental illnesses. Given their academic background and professional training, they are expected to deal with physical and psychological consequences that accompany mental disorders. Unfortunately, some studies reveal that HCPs are unaware of common mental disorders and have limited knowledge in this regard [17]. Moreover, most HCPs hold false beliefs about mental illness, which pose a major obstacle to the successful management of mental illness at the community level [18].

Despite research on MHL initiatives for adolescents and adults, literacy for mental health problems in childhood has been overlooked to a great extent. As no psychometric measurement has been developed to assess adults' knowledge and beliefs about child mental health disorders, it has not been systematically evaluated in the interventions. There is a need for various interventions to improve the MHL level of the population regarding mental health disorders, which is higher among children and adolescents. It is believed that such interventions have the potential to improve appropriate help-seeking in the early period and treatment intake and thus, may reduce the prevalence of childhood mental health disorders.

Interventions regarding child MHL should generally target all adults, even though they do not have children, parents, teachers, HCPs, and children. Nonetheless, studies involving these target groups are insufficient. All groups are essential targets in enhancing child MHL. However, the general adult population should be the primary target group to improve knowledge and beliefs about child mental health disorders and their treatment at the community level. Considering the field of health, pediatricians are often the first individuals with whom parents talk about their concerns regarding their children. Similarly, they are mostly the first to report the problems experienced by children and adolescents. Children and adolescents with chronic physical illnesses are more vulnerable to mental problems such as anxiety and depression. Mental illnesses that cannot be identified in children and adolescents, further impair the achievement of developmental tasks necessary for optimal health and life in adulthood. It becomes more valuable, particularly in regions where there is no child psychiatrist. Therefore, pediatricians' MHL level is of great importance in the early diagnosis of mental problems that may have a lifelong impact and in directing patients to child psychiatry clinics for the appropriate treatment.

This study aimed to assess the knowledge and awareness levels of pediatricians on MHL.

Material and Methods

This study was designed as a cross-sectional self-report questionnaire-based internet study conducted from 01 February to 25 February 2021. The population of the study consisted of pediatricians. The data were collected using Google Forms questionnaires (Google, California, USA) sent to volunteer physicians' smartphones, who were reached from hospital databases and research groups. Two hundred ten physicians answered the questionnaire, and 140 of them (66.6 %) completed the questionnaire.

Sociodemographic Data Form

Sociodemographic Data Form was created by the researchers. It includes questions about pediatricians' age, sex, marital status, professional experience, and possible sources of information about child mental health.

Mental Health Literacy Scale (MHLS)

It ensures identification of the MHL levels of individuals and missing areas of knowledge. It is a Likert-type self-assessment tool consisting of 35 items and is evaluated over the total score. For items with four statements (items 1–15), assessment is made on a four-point scale: "strongly disagree" (1), "disagree" (2), "agree" (3), and "strongly agree" (4). For items with five statements (items 16–35), assessment is made on a five-point scale: "strongly disagree" (1), "disagree" (2), "neither agree nor disagree" (3), "agree" (4) and "strongly agree" (5). Although the original scale was one-dimensional, this research revealed six dimensions, as previously revealed in the study by Gorczynki et al. (2017). The scale has six sub-dimensions, namely F1: Ability to recognize disorders (items 1–8), F2: Knowledge of where to seek information (items 16–19); F3: Knowledge of risk factors and causes (items 9 and 10); F4: Knowledge of self-help/self-treatment interventions (items 11 and 12); F5: Knowledge of professional help available (items 13–15); and F6: Attitudes that promote recognition or appropriate help-seeking behavior for mental illnesses and attitudes towards mental disorders (items 20–35) (stigmatization). Some items are reverse coded (items 10,12,15 and 20–28). The scale score is calculated by adding all the scores in the answers given to the scale items. The total score to be obtained from the scale ranges from 35 (lowest) to 160 (highest). Cronbach's alpha coefficient has been reported to be 0.87 in the validity and reliability study of the original language scale and to be 0.89 in the validity and reliability study of the Turkish version of the scale, which was conducted by Tokur-Kesgin et al [19].

Statistical Analysis

Statistical analysis was performed using SPSS version 22.0 software. Results were expressed as mean±standard deviation, median (minimum-maximum), and number (%) for ease of understanding. Visual (histogram and probability graphs) and analytical (Kolmogorov-Smirnov, Shapiro-Wilk tests) were used to determine whether the variables followed a normal distribution. To allow appropriate calculations and facilitate comparisons, health literacy index scores are obtained by being standardized on a metric between 0 and 50, using the formula:

Index score = (Mean – a) * (50/b)

Index score refers to the index score calculated individually; mean refers to the mean of the relevant items for each participant; "a" refers to the smallest possible value of the mean (or the mean that causes the index score to be zero); "b" refers to the mean range; "50" refers to the maximum score (score) selected for the new metric. Participant's MHL levels can be determined according to their MHL index scores. The 0–25 are considered insufficient MHL, and the values of 25–33 as limited MHL, 33–42 as sufficient MHL, and 42–50 as excellent MHL. A p-value of <0.05 was considered statistically significant.

Ethical Considerations

The study was approved by the Non-Invasive Studies Ethics Committee of Sakarya University with the number E-71522473-050.01.04-5954/08 on 29.01.2021.

Results

In the study, the data of 140 participants were analyzed. The participants' mean age was 37.7 years, and 62.1% were females, 73.6% were married, and 75% were working as specialists. The mean professional experience was 12.5 years. Table 1 shows the sociodemographic variables.

When MHLS was evaluated, the median score was 113 out of 150 (min: 89, max: 134). The characteristics of total scores and sub-scores obtained from MHLS are summarized in Table 2.

The level of MHL according to the index is accepted as insufficient MHL (0-25), limited MHL (25-33), sufficient MHL (33-42), and excellent (42-60). Considering index scores, 15% (n:21) of the participants were observed to have insufficient MHL. Other classes percentages were 37.1% (n:52) limited MHL, %19.3 (n:27) sufficient MHL and %28.6% (n:40) excellent MHL.

Table 1. Sociodemographic variables

Study Parameter	Mean ± SD (n:140)
Age (years)	37.7 ± 9.0
Gender	
Male	37.9% (n:53)
Female	62.1% (n:87)
Marital Status	
Single	26.4% (n:37)
Married	73.6% (n:103)
Academic title	
Research Assistant	20.7% (n:29)
Specialist	75.0% (n:105)
Instructor	4.3% (n:6)
Professional experience (year)	12.5±9.1
Did you do a child and adolescent psychiatry internship during your medical education?	
Yes	52.1% (n:73)
No	47.9% (n:67)
Did you attend a child and adolescent psychiatry rotation during your specialty training?	
Yes	55.0% (n:77)
No	45.0% (n:63)
Did you attend a training or meeting on child and adolescent psychiatry?	
Yes	65.7% (n:92)
No	34.3% (n:48)

Note: SD: Standard Deviation.

Table 2. Mental Health Literacy Scale

Study Parameter	Mean ± SD	Median (Min-Max)	Maximum scale score
F1: Ability to recognize disorders	25.2±3.3	24 (18-32)	32
F2: Knowledge of where to seek information	14.5±3.1	15 (4-20)	15
F3: Knowledge of risk factors and causes	5.6±1.0	6 (4-8)	8
F4: Knowledge of self-help/self-treatment	5.6±0.9	5 (4-9)	8
F5: Knowledge of professional help available	9.3±1.5	9 (7-13)	12
F6: Attitudes that promote recognition or appropriate help-seeking behavior for mental illnesses	53.7±6.6	53 (40-73)	75
Total	113.9±9.9	113 (89-134)	150

Note: F: Factor; SD: Standard Deviation.

Logistic regression analysis was performed using sociodemographic variables to distinguish participants with excellent MHL from insufficient MHL. The variables given in Table 1 were analyzed by the retrospective elimination method. In the sixth step, the model correctly classified participants with excellent MHL by 85.1% and those with insufficient MHL by 61.2% (Nagelkerke R2: 0.27, p: 0.01). Participation in training on child psychiatry (odds ratio [OR]: 7.5) predicted excellent MHL, while increased years of professional experience were observed to predict insufficient MHL (OR: 0.9 per year). Logistic regression analysis performed to predict insufficient MHL is shown in Table 3.

Table 3. Predictive factors for insufficient MHL

Study Parameter	B	SE	p	OR	95% CI
Participating in Training on Child and Adolescent Psychiatry	2.01	0.64	0.01	0.93	2.10-26.44
Professional Experience	-0.08	0.28	0.03	7.46	0.86-0.95
Constant	0.09	0.59	0.87	1.10	-

Note: CI: Confidence Interval; SE: Standard Error; OR: Odds Ratio.

Discussion

The present study included a total of 140 pediatricians. Half of the participants have been observed to have insufficient and limited MHL. Studies conducted in various countries, albeit rare, draw attention to the fact that childhood mental disorders are not sufficiently recognized and understood in the general population [20]. In a study conducted in a pediatric hospital in Arabia in 2017, low MHL levels have been reported among HCPs [21]. The literature review shows that studies involving HCPs have primarily included primary health care providers rather than specialized groups. This may be attributed to the fact that HCPs working in this field have a critical role in promoting positive mental health in the community and providing better access to primary care mental health services. Unfortunately, studies have revealed that even among primary care physicians and general practitioners, there is a stigmatization and shame culture that can be a significant barrier to mental illness's efforts to receive and access better mental health services. A study from Zambia showed that primary HCPs were uncomfortable in dealing with mentally ill patients and recommended handcuffs [22]. In another study conducted in China, the authors found that stigmatizing attitudes were prevalent among primary HCPs. Their pessimistic beliefs toward the mentally ill led to a decrease in their capabilities in providing adequate mental health services to such individuals [23].

Training for mental illnesses plays a vital role in altering stigmatizing beliefs and attitudes of HCPs towards mental illnesses. We observed that attending training courses or meetings on child mental health predicted excellent MHL in the present study. A project implemented in the United States of America aimed to evaluate the two-stage training program to enhance family physicians' skills and confidence in the diagnosis and treatment of patients with mental health problems. Within the program's scope, family physicians were provided with adult mental health and mental health first aid training. At the end of the project, it was reported that the training had a positive effect on the clinical practice of the participants, and behavior change tools were effective [24].

The results have demonstrated that increased years of professional experience predict insufficient MHL levels. Medicine is a field that constantly improves and renews itself. Studies, particularly in areas such as human psychology, reveal new findings. Pediatricians attend many training courses and meetings during and after their specialty training. However, in the following years, they may not find the time and energy required to participate in training courses outside their specialty. Therefore, they may have difficulties in keeping up with the developing and changing literature. Literature data and our findings show a need for specialty training and subsequent training and meetings on mental health.

Conclusion

This study has investigated pediatricians' knowledge levels and beliefs about mental health disorders, which may cause serious health, social, and family problems in children and adolescents when overlooked, and treatment is delayed. The present study shows that organizing training and meetings in specialty training and intermittently afterward to improve MHL will be beneficial among pediatricians in recognizing groups with mental illness or at risk, referring them to child psychiatry clinics and preventing potential future diseases. The effect of such interventions may initially be uncertain at the beginning. Therefore, there is a need for further research before appropriate planning.

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